Reported HIV infections in Kansas between 07-01-1999 and 06-30-2000

Kansas Department of Health and Environment
Bureau of Epidemiology and Disease Prevention

For further information, contact the HIV/STD section at 785-296-5587 October 2000

Reported HIV infections in Kansas, 07/01/99 and 06/30/00

Executive Summary

This report represents a summary of the first year of HIV reporting in the state of Kansas following the enactment in July 1999 of state law that required confidential HIV reporting to the Kansas Department of Health and Environment (KDHE). Ninety-nine cases of HIV disease were diagnosed and reported from July 1, 1999 through June 30, 2000. This compares to 96 cases of AIDS, a condition that has been reportable.

HIV reporting data indicates that five Hispanic women were diagnosed and reported with HIV representing 20% of all newly diagnosed and reported cases of HIV in women for the period. No Hispanic women were reported as having AIDS, underscoring how AIDS reports are not indicative of current trends in HIV infection. These data suggest that HIV infection may be spreading among Hispanic women at a higher rate than in the past and is more common than among women of other ethnic and racial backgrounds.

Most individuals with newly identified HIV infections live in the metropolitan areas of the state. Among people with newly recognized HIV infection, women, African Americans, and Hispanics are found more often than among individuals diagnosed with AIDS, who were probably infected many years ago. The rates of infection in minority populations are also out of proportion to their numbers within the population as a whole. Similar trends have been observed in other states.

There was no reduction in the number of tests performed in publicly funded HIV Counseling and Testing Sites (CTS) as a result of incorporating confidential (i.e., name linked) testing for HIV. Confidential tests comprise 87% of all HIV tests performed through public sites. Over half (53%) of the newly diagnosed and reported cases of HIV were reported by private physicians. Over a quarter (26%) of new cases were found through publicly funded testing sites including CTS, STD clinics and corrections settings. Disease intervention specialists (DIS) utilizing behavior change oriented partner counseling and referral services (PCRS) tenets interviewed 103 persons with HIV disease during the period and found 11 previously undiagnosed cases as a result of their activities.

One of the primary goals of the HIV/STD program is to refer individuals into clinical care services. Forty-seven (47%) of all newly diagnosed and reported HIV positive individuals were effectively referred to publicly funded Ryan White Care Services. These include individuals found through HIV Counseling and Testing sites, disease intervention and prevention linked testing.

Background

Beginning July 1, 1999, HIV reporting was implemented in Kansas. The new law requires physicians and laboratories to report all confirmed positive HIV test results to the Kansas Department of Health and Environment (KDHE). The confidential case reports submitted to KDHE include the name of the person tested, demographic information, physician's name, testing facility and risk factor information, including pregnancy status.

The KDHE uses the information gathered to determine trends in disease, set policies, develop interventions, assure access of patients to care and services, and distribute information that may be useful to the public.

Reporting completeness is essential for a complete understanding of the impact that HIV disease is having upon Kansas. An unrelated study to assess the proportion of women known to be infected with HIV giving birth indicated that at least 74 women were known to be infected with between 1989 and 1998 and that 47 of these were never reported with no known follow-up on the mother or child because of a lack of reporting. HIV reporting will allow for follow-up on pregnant women to ensure that they receive information that will allow them to make choices that include the taking of medications that can reduce the risk of infecting their child by almost two thirds. Further, follow-up can also be performed on the children to ensure adequate care.

HIV information included in this report refers to results reported to KDHE between July 1, 1999 and June 30, 2000. Data presented as HIV data **DO NOT** include information on individuals that were diagnosed with AIDS during the same period; information on those individuals is analyzed and presented separately.

Results of Analysis

Case count and demographic characteristics

Between 07/01/99 and 06/30/00, 201 confidential HIV case reports were submitted to KDHE on individuals with a positive HIV test in Kansas. Although anonymous testing is available in Kansas through public sites, no anonymous positive tests were reported after July 1, 1999. Although reported during the period, 102 of the 201 individuals were initially diagnosed with a positive HIV test prior to July 1999 when HIV infection was not reportable (see Table 1). This is a normal phenomena that results from the required reporting from all physicians and laboratories.

Table 1 - Date of testing* of the 201 HIV positive individuals reported in Kansas, 07/01/99 and 06/30/00

Date of testing	Number (%)
7/1/99-06/30/00	99 (49)
1/1/95-6/30/99	63 (32)
1/1/90-12/31/94	23 (11)
Before 1990	16 (8)

Percentages do not add up to 100 due to rounding.
* date of testing = date of first known EIA positive test confirmed by Western Blot.

Unless otherwise specified, the rest of this analysis will only include the 99 persons with positive HIV tests performed and reported between 07/01/99 and 06/30/00. Of the 99 individuals with a positive HIV test first performed and reported during this period, over 50% were first tested through private physicians, as seen in Table 2.

Table 2 - Testing facility of individuals in Kansas with HIV positive tests first tested and reported between 07/01/99 and 06/30/00

Facility	Number	(%)
Private Physicians	52	(53)
Counseling and Testing Sites	20	(20)
STD Clinic	3	(3)
Correctional Facility	3	(3)
Hospital, Inpatient	6	(6)
Hospital, Outpatient	3	(3)
Emergency Room	3	(3)
Plasma/Blood Bank	3	(3)
Other*	6	(6)
Total	**99**	**(100)**

Percentages do not add up to 100 due to rounding.
** Includes life insurance and out-of-state reports*

Table 3 compares individuals with positive HIV tests to the 96 individuals with AIDS, diagnosed and reported during the same period by selected characteristics. HIV/AIDS surveillance data categorizes race and ethnicity together. "Hispanic " refers to those who self-identify as Hispanic of any race. "Other" includes Native Americans/Alaskan

Natives, Asians/Pacific Islanders, those who identify as "mixed race", and those for whom no race information is obtained. Risk behaviors listed are mutually exclusive, that is a person will be categorized with only one risk behavior. If multiple risk behaviors are found, a CDC derived hierarchical algorithm is used.

Table 3 - Selected characteristics of individuals in Kansas diagnosed with HIV or AIDS and reported between 07/01/99 and 06/30/00

Characteristic	**HIV (N=99)**		**AIDS (N=96)**	
	Count	**%**	**Count**	**%**
Sex				
Male	74	(75)	82	(85)
Female	25	(25)	14	(15)
Race/ethnicity				
White, non-Hispanic	56	(57)	62	(65)
African-American, non-Hispanic	22	(22)	21	(22)
Hispanic	13	(13)	11	(11)
Other	8	(8)	2	(2)
Age				
Mean (average) age, years	34.0		38.4	
Age range, years	2-62		10-68	
Risk factors				
Male-male sex	34	(34)	47	(49)
Male-male sex and Injection drug use	8	(8)	6	(6)
Injection drug use	16	(16)	14	(15)
Heterosexual sex	19	(19)	15	(16)
Risk not identified	20	(20)	9	(9)
Other*	2	(2)	5	(5)

** Includes pediatric cases, transfusion/organ recipients, hemophiliacs, and risks not otherwise classified*

One fifth (20) of the individuals with a positive HIV test are considered to have no identified risk (NIR) at this time. This is within the range expected. Further investigation of these reports can be expected to reduce the number of cases without an identifiable risk. There were three times as many men as women and more whites than persons of color with a positive HIV test. However, among women, newly diagnosed HIV and AIDS cases were highest for women of color as seen in Table 4. Also, more women were diagnosed with HIV than diagnosed with AIDS during this period. These differences do not reach statistical significance which may be due to small numbers.

Of note, is the number (5) and percentage (20%) of Hispanic women diagnosed and reported with HIV during the period as a portion of all reports (Table 4). In addition, is the fact that no Hispanic women were diagnosed and reported with AIDS during the period. Although the low numbers do not yet allow for any firm conclusions, these data suggest that HIV infection may be spreading among Hispanic women at a higher rate than in the past and

is more common than among women of other ethnic and racial backgrounds. A similar trend has been observed in other states.

Table 4. Race/Ethnicity distribution for women diagnosed with HIV or AIDS and reported between 07/01/99 and 06/30/00

	HIV		AIDS	
Race/Ethnicity	**Number**	**(%)**	**Number**	**(%)**
White, non-Hispanic	8	32	5	36
African American, non-Hispanic	9	36	8	57
Hispanic	5	20	0	0
Native American	0	0	1	7
Unknown	3	12	0	0
Total	**25**	**100**	**14**	**100**

Geographical distribution

Information on the county the person was living in is known for all 99 individuals with a positive HIV test and all 96 individuals with AIDS diagnosed and reported during this period, as shown in Table 5. This location may not reflect where the person was tested or may be seeking care. To protect the confidentiality of those persons, information on county of residence is presented by HIV/AIDS case management region. A map of the case management regions is attached to the end of this report. The highest number of reported cases were for individuals living in areas with the highest population density, that is, Regions 1 and 2 (which include the Kansas City metropolitan area), Region 4 (which includes Topeka), and Region 8 (which includes the Wichita area). Given the relatively small number of reports, meaningful rates by region could not be calculated. There were no individuals with a positive HIV test performed and reported during this period living in Region 3.

Table 5 - Region of residence at the time diagnosis with HIV or AIDS and reported between 07/01/99 and 06/30/00

Region	HIV (N=99)	AIDS (N=96)
1	20	16
2	8	14
3	0	2
4	15	10
5	3	2
6	6	5
7	3	3
8	39	43
9	5	1

Testing patterns

During the first year after the implementation of confidential HIV reporting, 12,727 specimens were submitted for HIV testing to the KDHE Division of Health and Environment Laboratory (DHEL) from KDHE contracted Counseling and Testing Sites (CTS) throughout Kansas. This is slightly higher than the 12,407 tests submitted between July 1, 1998 and June 30, 1999 before the implementation of HIV reporting. All public CTS offer either a confidential HIV test (i.e., with the name, demographic information and risk factor of the tested individual) or anonymous HIV test (with a unique identifier for the individual is created but no name is collected). During the first year after implementing confidential HIV reporting, 87% (11,072) of all tests submitted by CTS to DHEL had a name. The proportion of confidential testing at CTS has increased from 79% in July 1999 to 91% in June 2000. Of the 20 HIV positive individuals tested at CTS, 11 (54%) are now enrolled in Ryan White Services, one in Medicaid, one has private health insurance, and 7 have no known care services.

Prevention Linked Testing

As a part of the evaluation of federally funded HIV/AIDS programs, a system has been set up to evaluate the impact of referrals from external sources to HIV counseling and testing sites. Funded CTS personnel are asked to elicit how a person was referred to a site using one of 43 designated codes. Funded Health Education and Risk Reduction (HERR) projects are required as part of their contract to refer individuals to counseling and testing. Although this referral coding system is still being developed, 1,049 referral codes were

identified from persons tested at CTS. Of the 20 positive HIV individuals from CTS, two had referral codes listed. One was from a KDHE supported HIV prevention project, the other was a referral by an infected partner.

Referral to services

One of the goals of HIV surveillance is to identify infected individuals so they can be offered medical services to prevent the development of AIDS and to control other complications of HIV infection. All HIV positive persons are referred to medical services, and other forms of assistance, including case management services. If a patient does not have the resources to purchase his or her own medical care or other needed services, federal and state support is available. There were 124 new persons enrolled into the Ryan White Title II (i.e., publicly funded) care services between July 1, 1999 and June 30, 2000, 23 of whom were among the 99 newly identified HIV-infected individuals. The 124 new enrollees during this period compares with 104 between July 1, 1998 and June 30, 1999 illustrating the increase in individuals seeking care through Ryan White Title II. 24 individuals were linked to Ryan White Title I and III services. Medical coverage as of June 30, 2000 for the 99 persons newly diagnosed and reported with HIV between July 1, 1999 and June 30, 2000 in Kansas is summarized in Table 6.

Table 6 - Medical Coverage * for newly identified HIV-infected individuals reported in Kansas between 07/01/99 and 06/30/00.

Medical coverage	**Number of persons count**	**percentage**
Ryan White, Title I	4	(4)
Ryan White, Title II	23	(23)
Ryan White, Title III	20	(20)
Medicaid	5	(5)
Private insurance	10	(10)
Clinical Trial	3	(3)
No coverage to date	4	(4)
Unknown	30	(30)
TOTAL	**99**	**(100)**

** As of 09/01/2000*

Of the 30 persons with unknown coverage, 11 are residents of counties where Ryan White Title I coverage is available, but at this time have not enrolled in that program.

Investigation to determine the medical coverage for the individuals with unknown coverage is continuing.

Partner Counseling and Referral Services (PCRS)

Disease Intervention Specialists (DIS) from the HIV/STD section of KDHE perform partner counseling and referral services (PCRS) for persons reported with an STD, including HIV and AIDS. For HIV-infected individuals, DIS attempt to interview all individuals reported to have a positive laboratory test for HIV from public sites and those reported from private sites, upon agreement with the physician. All HIV-positive persons interviewed by DIS are given extensive prevention counseling on how to minimize the risk of transmission of infection to sexual and needle sharing partners. All HIV positive persons are referred to medical services, and other forms of assistance, including case management services (see previous section for details). In addition, infected individuals are offered assistance contacting their partners. For partner notification purposes, partners are defined as those with whom an HIV-infected individual had either sexual contact or shared injection drug equipment within twelve months prior to the individual's positive test result. After an interview with an HIV-infected individual, the DIS assists the individual in contacting and informing any sexual and/or needle sharing partners who can be located of their exposure to HIV or assists the infected individual in notifying his/her sexual and/or needle sharing partners of their exposure to HIV. Federal legislation requires that efforts be made to notify persons who have been a spouse of an HIV-infected person at any time within the 10 year period prior to the first positive HIV test. All PCRS are provided in person and in a confidential setting. All partners are strongly encouraged to be tested for HIV.

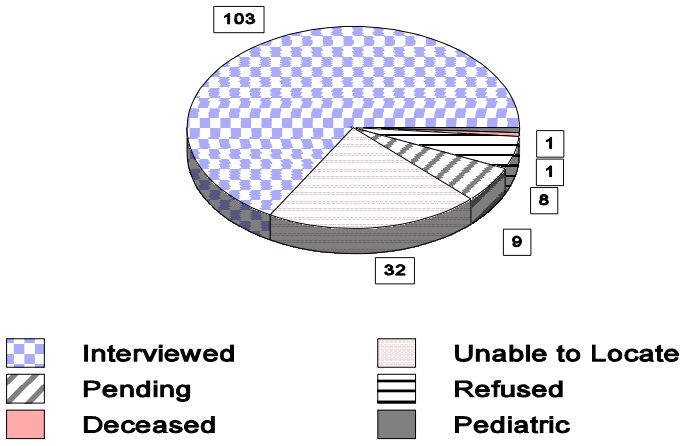
Table 7 -Partner Counseling and Referral Services Interviews and Field Activity 7/1/1999 - 6/30/2000

INDICATORS	Number
Reported HIV Infections	201
New & other HIV+ persons referred for partner counseling and referral services	154
New & other HIV+ persons located and interviewed for partner counseling and referral services	103
Number of interview period partners (sex &/or needle sharing) elicited	463
Partners initiated for follow-up	192
Partners tested	139
New HIV+ partners identified	11

As noted earlier, there were 201 HIV case reports from 7-1-99 through 6-30-00 including reports on individuals diagnosed before the implementation of HIV named reporting but seeking care after July 1, 1999. Table 7 provides a detailed breakdown of the field activity generated by these cases. DIS were assigned to interview a total of 154 HIV-infected individuals in Kansas from July 1, 1999 to June 30, 2000. Forty-seven of the 201 reported HIV cases were not initiated to DIS due to documentation of previous follow-up. One hundred and three (103 or 67%) of the 154 individuals assigned to DIS were interviewed using PCRS principles. The others were not interviewed for reasons indicated in figure 1. This percentage is similar to that of other STD's investigated by DIS. Based upon information discovered through these DIS follow-ups and provider reports to the surveillance office, it was determined that only 99 of the 201 initial HIV reports were newly diagnosed cases of HIV during the time period of July1,1999 to June 30, 2000.

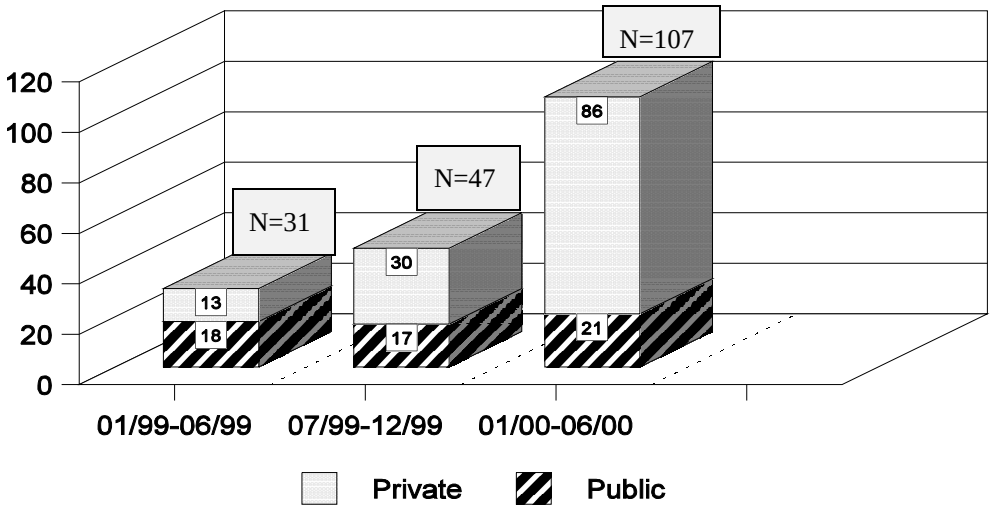
From the 103 completed interviews, 463 partners were indicated. Of these, 192 (41%) had sufficient information to locate them and were initiated for follow-up. From these, eleven previously undiagnosed individuals tested positive for HIV infection. DIS investigations for this period uncovered and tested 115 individuals who had not previously been tested that were engaging in high risk behavior. Eleven new cases of HIV were diagnosed and reported as a result of PCRS activity. These individuals did receive HIV prevention counseling targeting behavior changes. In addition, under reciprocal agreements, DIS were also assigned 19 interviews for HIV+ individuals tested in other states but living in Kansas. There were no new cases found as a result of these interviews.

Figure 1 - Results of 154 HIV + Reports Referred for Interviews



A larger proportion of the requests for interviews came from private health care providers in the first half of 2000 as compared with the first half of 1999 with an overall increase for interview, as shown in Figure 2.

Figure 2 HIV Interviews assigned to DIS, Kansas 01/99 - 06/00



As a part of standard policies and procedures, all positive persons identified through reporting and PCRS are referred to care services. Six of the 11 new infected individuals identified through PCRS have enrolled in Ryan White Care Services as seen in Table 8.

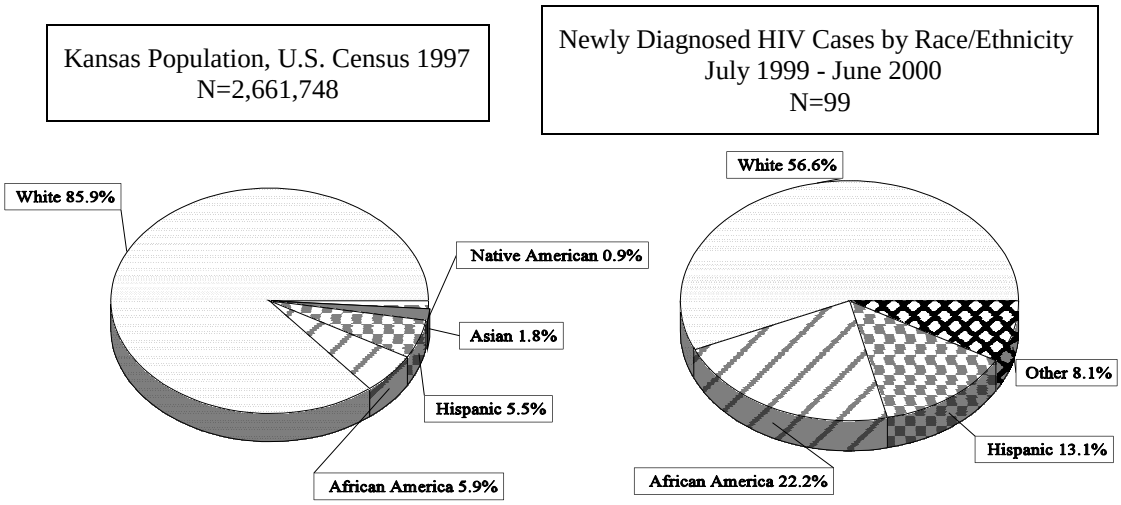
Table 8 - Medical Coverage for HIV cases discovered through partner counseling and referral services in Kansas 07/01/99 and 06/30/00

Medical Coverage	**Number of persons**	
	number	**percentage**
Ryan White, Title I	1	(9)
Ryan White, Title II	4	(36)
Ryan White, Title III	1	(9)
Medicaid	1	(9)
Private insurance	1	(9)
Other	1	(9)
Unknown	2	(18)
Total	**11**	**(100)**

Percentages do not add up to 100 due to rounding

Discussion

The information presented in this report on the results of HIV reporting and associated service delivery for the first year of HIV reporting contributes new information to our knowledge of HIV in Kansas. Although a diagnosis of HIV non-AIDS does not indicate the length of time a person has been living with the disease, it can be used as an indicator of more recent risk and transmission patterns and point to where primary HIV prevention efforts should be focused.



There were more men than women, and more whites than African-Americans among people with a positive HIV test identified and reported between July 1, 1999 and June 30, 2000. Although more whites were identified as positive, the distribution of newly identified HIV positives among African-Americans and Hispanics is extremely high when compared to their distribution within the Kansas population as shown in figure 3. In addition, among women with a positive HIV test or newly diagnosed with AIDS during this period women of color represented the highest group as shown in Table 4. Hispanic women in particular reflect a large percentage of newly diagnosed and reported cases of HIV in the first year.

These differences may reflect a change in demographic and risk factors associated with HIV infection in Kansas. Another possible explanation is that women and minorities are seeking care and are identified as having a positive HIV test earlier than other groups. This explanation cannot be excluded, although it is contrary to trends observed in other areas of the country. Alternatively, newer therapies may be more effective among women in slowing the progression from HIV to AIDS than in men. These hypotheses can be tested as

more people with HIV are identified and reported and as the surveillance system gathers more information on individuals with HIV infection.

Eleven previously unrecognized HIV infections were discovered and reported as a result of DIS investigations that were not possible before HIV results were reported with names. Seven of these individuals are known to be enrolled in federal or state programs.

Since the implementation of HIV name reporting, the number of requests for partner counseling and referral services from private sources continues to increase. This primary and secondary prevention can be an important factor in slowing transmission of HIV in Kansas. The shorter the time interval from an initial identification to the time of reporting, the more likely that DIS will be able to locate the index patient and partners for interview and follow-up and refer the person to existing care services. This underscores the importance of prompt and timely reporting. Eighty four percent of the newly diagnosed HIV cases were reported within 60 days of the initial HIV test date. This compares favorably with national averages.

The number of HIV-positive individuals in Kansas for whom there is no identifiable risk (NIR) is 19.4% and exceeds that for AIDS cases (3.6%). This is similar to what has been seen nationally. The national NIR rate is 9% for AIDS cases and 30% for HIV. One possible explanation is that the longer a person has been identified as having HIV infection, the more likely he or she is to acknowledge risk behavior. However, the NIR rates for HIV should continue to decline with partner counseling and referral services now more accessible with HIV name reporting.

This analysis is based on a relatively small number of HIV records over a short period of time compared to AIDS data. This analysis shows that HIV reports are generating important information that is used for prevention, counseling, and referral activities. Despite the limitations of the available data, it appears clear that HIV reporting and the public health interventions that arise from the activity can be used to define the extent and characteristics of the infection, to identify individuals with HIV infections, and to refer infected individuals to available counseling and care services.

HIV REGIONS in KANSAS